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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/530,328	04/05/2005	Toshiaki Hiraki	L9289.05127	3075
24257 7590 10/23/2007 STEVENS DAVIS MILLER & MOSHER, LLP 1615 L STREET, NW SUITE 850 WASHINGTON, DC 20036			EXAMINER EWART, JAMES D	
			ART UNIT 2617	PAPER NUMBER
			MAIL DATE 10/23/2007	DELIVERY MODE PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

## Office Action Summary

Application No.

10/530,328

Applicant(s)

HIRAKI, TOSHIAKI

Examiner

James D. Ewart

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on October 10 2007 amendment.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-6 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1 and 6 is/are rejected.
- 7) ☒ Claim(s) 2-5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 05 April 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☒ Certified copies of the priority documents have been received.
  - 2) ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

***Response to Arguments***

1. Applicant's arguments filed October 10, 2007 have been fully considered but are deemed moot in view of new grounds of rejection.

***Information Disclosure Statement***

2. The information disclosure statement filed April 05 2005 fails to comply with 37 CFR 1.98(a)(2), which requires a legible copy of each cited foreign patent document; each non-patent literature publication or that portion which caused it to be listed; and all other information or that portion which caused it to be listed. It has been placed in the application file, but the information referred to therein has not been considered.

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 1 and 6 are rejected under 35 USC 103(a) as being unpatentable over Takano et al. (U.S. Patent Publication No. 2002/0173312) in view of Harrison et al. (U.S. Patent No. 6,754,475) and further in view of Ito et al. (U.S. Patent No. 5,722,065)

Referring to claims 1 and 6, Takano et al. teaches a mobile station apparatus comprising: a first receiver that performs first receive processing of a downlink data channel, including demodulation, decoding, and error detection (Figure 3, 26 and 0080); a second receiver that performs second receive processing of a downlink control channel that carries control information required in the first receive processing, including demodulation and decoding (Figure 3, 25 and 0071,0079 & 0080, 25 is linked to 26 and being that the control unit 25 receives control information, in order to obtain the information the radio signal must be processed similar to the user information sent to 26); a detector that detects a timing a transmit mode changes in a base station apparatus that transmits the downlink data channel and the downlink control channel (0018 and Figure 3, 24,25), but does not teach wherein the mode is transmit diversity and a controller that stops one or both of the first receive processing and the second receive processing depending on the timing detected in the detector. Harrison et al. teaches wherein the mode is transmit diversity (Column 7, Lines 44-61) and a controller that stops one or both of the first receive processing and the second receive processing depending on the timing detected in the detector (Figure 3, 330,331,332 & 319 when switching to open loop transmit diversity, feedback is not required and thus the feedback / processing is stopped via switch 319 which switches to the transmit processor Column 10, Lines 9-18). Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teaching of Takano et al. with the teaching of Harrison et al. wherein the mode is transmit diversity and a controller that stops one or both of the first receive processing and the second receive processing depending on the timing detected in the detector to access transmission performance and use it to select a transmission mode (Column 1, Lines 6-9). Takano et al. and

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Harrison et al. teach the limitations of claims 1 and 6 but do not teach stops the receive processing depending on one of (i) a relationship between the detected timing and a sub-frame period and (ii) a relationship between the detected timing and a slot period. Ito et al. teaches stops the receive processing depending on one of (i) a relationship between the detected timing and a sub-frame period (Column 2, Lines 38-58 and abstract) and (ii) a relationship between the detected timing and a slot period. Therefore, at the time of the invention, it would have been obvious to one of ordinary skill in the art to combine the teaching of Takano et al. and Harrison et al. with the teaching of Ito et al. wherein the received processing is stopped depending on one of (i) a relationship between the detected timing and a sub-frame period (Column 2, Lines 38-58 and abstract) and (ii) a relationship between the detected timing and a slot period to reduce unnecessary consumption of power (Column 2, Lines 31-32).

*Allowable Subject Matter*

4. Claims 2-5 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims. The reason for patentable subject matter is provided below:

Referring to claim 2, the references cited do not teach wherein, when the timing comes in a sub-frame period of a sub-frame of the downlink data channel, the controller stops the first receive processing with respect to said sub-frame of the downlink data channel.

Referring to claim 3, the references cited do not teach wherein, when the second receive processing is stopped with respect to a sub-frame of the downlink control channel, the controller

stops the first receive processing with respect to a sub-frame of the downlink data channel the first receive processing of which is performed using control information transmitted in said sub-frame of the downlink control channel.

Referring to claim 4, the references cited do not teach wherein, when the timing comes in a sub-frame period of a sub-frame of the downlink control channel, the controller stops the second receive processing with respect to said sub-frame of the downlink control channel.

Referring to claim 5, the references cited do not teach wherein, when the timing comes in a slot period N slots before a sub-frame period of a sub-frame of the downlink control channel, the controller stops the second receive processing with respect to said sub-frame of the downlink control channel, said N being a natural number.

### *Conclusion*

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37

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CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

5. Any inquiry concerning this communication or earlier communications from the examiner should be directed to James D. Ewart whose telephone number is (571) 272-7864. The examiner can normally be reached on M-F 7am - 4pm. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Trost can be reached on (571) 272-7872. The fax phone numbers for the organization where this application or proceeding is assigned are (571) 273-8300 for regular communications and (571) 273-8300 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (571) 272-2600.



James Ewart  
October 17, 2007



WILLIAM TROST  
SUPERVISORY PATENT EXAMINER  
TECHNOLOGY CENTER 2600